

Annals Of Agric. Sc., Moshtohor,
Vol. 45(2): 799-804, (2007).

**EFFECT OF ALAR ON THE FLOWERING AND SEED PRODUCTION
OF ONION**

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ABSTRACT

Two field experiments were carried out on onion (Giza 6 improved) during the two successive seasons of 2001-2002 and 2002-2003 to study effect of mother bulb soaking in Alar for 12, 24 and 36 hours on flowering seed yield and quality of onion cv. Giza 6 improved.

The shortest period of Alar soaking increased the bolting days than the other treatments. The 12 hours Alar soaking significantly increased the number of seedstalk per plot in the second season only. Alar treatments decreased the height of seedstalk. The short period of soaking significantly increased the diameter of umbel and diameter of seedstalk than control treatment. The 12 hours soaking improved the seed yield per plot. The shortest period of Alar treatment increased the weight of 100 seeds. The short period of soaking induced increases in the seed germination percentage.

INTRODUCTION

As the growth of onion such a complex affair, it is not surprising to find that the inhibitors play a very important role in this concern. They affect cell enlargement, cell division, cell stem-stimulation of many compact plant types, dormancy of seed plant, germination, seeds talk etc.

Concerning the inhibitors substances which act as antighibberellins and include chlorinated derivatives of quaternary ammonium and phosphonium compounds such as N dimethyl amino succinic acid (Alar), it was applied success fully in the field of vegetable crops for different purposes. Among the many effects of three compounds on the prevent of sprouting in onions, potatoes and the production of dwarf plants. On the other hand it affect fruit maturity, earliness, numbers of flowers and many other plant processes (Audus 1972).

Sinnadurai *et al.* (1971) during their studies on onion treated with chloromequat (CCC) to regulate flowering found that a spray of 1000 ppm or more promoted flowering up till 3000 ppm which caused virtually all the plant to flower. In the same time, CCC application resulted in deep green leaves and stout flower stalks.